DN 0.9 / 1,2 mm; 0 - 10 bar;
CNOMO and BURKERT sub-base; flow rate: up to 40 l/min



Advantages/Benefits

- **Simple design, robust and frictionless**
- **Long service life, under absolute non-lube conditions**
- **Compact size - high flow rate**
- **PLC-compatible; low power and high drop-out voltage**
- **Wide choice of fluid and electrical interfaces**
- **Suitable for technical vacuum**
- **Wide accessory range of wired cable plugs**

Design/Function

The valve consists of a plastic body, a frictionless rocker armature with spring and a DC coil. A stainless steel plate hermetically isolates the fluid from the actuator.

The innovative rocker alternately opens or closes two connections when switched. All 3/2 (or 2/2) circuit functions can be achieved by pressuring or exhausting a further outlet connection via them. The de-energized position is spring set.

The simple design ensures that the valves can be switched with a minimal rocker movement combining low wear under absolute non-lube conditions.

The external surfaces of the valve are smooth preventing dirt particles from adhering.
The valves can be driven by a PLC with their low power consumption .

For the electrical connection, there is a wide choice of wired cable plugs (Type 2506) available as accessories (standard, LED, rectifier, varistor). The operation with alternating current (230 V/50 Hz) is possible with the use of a rectifier.

A manual override allows easy maintenance and commissioning of the valve.

Type 6106 impulse version is a bistable valve. The operation has to be done through external pole reversal (e.g. PLC).

The advantages of the impulse version are functional safety at short time power failure, saving of energy and low heat generation.
It is applicable for switching systems with impulse control.

Applications

Fluids

- Lubricated, non-lubricated, dry air
- Neutral gases
- For technical vacuum

Applications

- As a direct-acting single valve or as a pilot valve
- For actuator control
- To solve logic control problems
- As valve manifold assemblies

bürkert
Easy Fluid Control Systems

Direct-acting rocker Solenoid Valve, sub-base mounting
16 mm wide

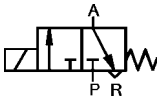
Type 6105/6106
(2/2-**/**3/2-way)

Technical Data

Circuit Functions

C 3/2-way valve, when de-energized, port A exhausted

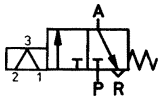
Symbols



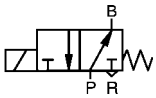
Circuit Functions

C 3/2 way valve, with **impulse** at terminal 1 outlet port A exhausted, with **impulse** at terminal 2 outlet port A pressurized

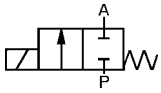
Symbols

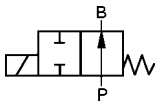


D 3/2-way valve, when de-energized, port B pressurized



A/B 2/2-way flow valve, on request





Specifications

Orifice DN	Flow QNn-value air[2]		Manifold		Pressure range[1]	Weight	Electr. power consumption
[mm]	P→A, B		A, B→R		[bar]	[g]	[W]
	BURKERT	CNOMO	BURKERT	CNOMO			
0,9	22	22	25	25	0– 8	55	1 (24 V DC only)
1,2	40	33	47	38	0–10	55	2 or 3

[1] All pressures quoted are gauge pressures with respect to the prevailing atmospheric pressure.
[2] Measured with 6 bar upstream pressure and 1 bar pressure drop across the valve at +20 °C.

Valve specification

Body material	PA (polyamide)
Seal material	FKM
Isolating plate between body and coil	stainless steel
Fluids	lubricated, unlubricated, dry air, neutral gases, for technical vacuum
Max. viscosity	approx. 21 mm²/s
Ambient temperature	–10 up to +55 °C
Fluid temperature	–10 up to +55 °C
Port connection	• CNOMO-interface, • BURKERT-interface with connection through the bottom (as Type 375)

Response times[3]

Opening delay time	10 ms
Opening	23 ms
Closing	21 ms

Response times for impulse versions
Minimum duration of impulse:

Release coil (tag 1 and 3)	20 ms
Operating coil (tag 2 and 4)	20 ms

[3] The response times of a 3/2-way valve are determined using an end volume of approx. 1 cm³. The tImes are measured at outlet A from switching on until pressure rise to 90% /pressure drops to 10%. Delay time: Time from electrical switching on until the beginning of the pressure change.
[4] Solenoid coils must only be operated with DC; otherwise use a cable plug with a rectifier (cf. accessory Type 2506).

Solenoid specification

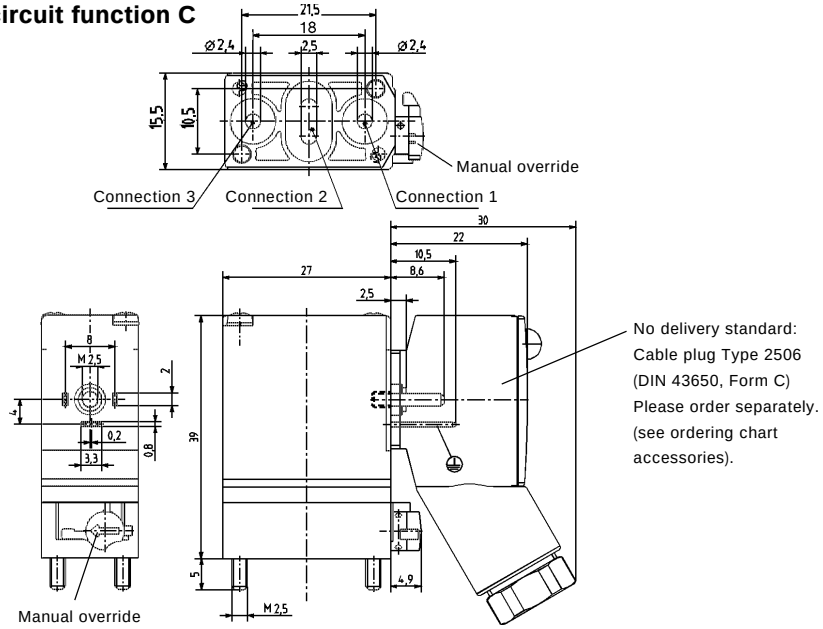
Nominal voltages[4]	24 V impulse (external pole reversal necessary) 24 V DC; 110–120 V DC; 220–240 V DC (12 V DC on request)
Voltage tolerance	±10 %
Power consumption	1 W/2 W at 24 V DC 3 W at 110–120 V DC 3 W at 220–240 V DC
Drop-out voltage (for switching rocker)	at least 0.15 x voltage nominal (under the regulations VDE 0580)
Electr. control	PLC-controllable
Switching frequency	1000 c.p.m.
Duty cycle	100 % continuously rated
Rating	IP 20 without cable plug IP 65 with cable plug
Type of protection	on request: EEx i IIC T6 (12 V DC / 0.5 W)
Electr. connection	
Standard:	• side tag connectors to DIN 43 650
On request:	• top tag connectors to DIN 43 650 Flying leads and round plugs
Cable plug	• Type 2506 as accessory

Installation/Accessories

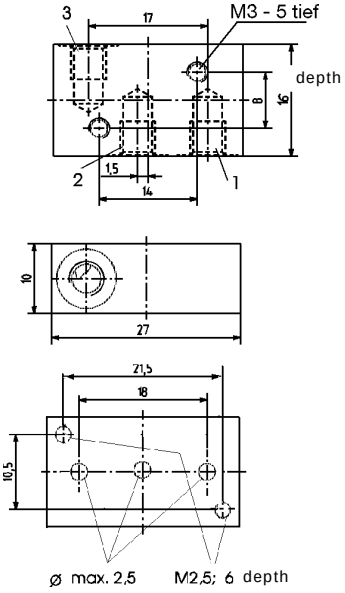
Installation	as required, but preferably with solenoid system upright
Manifolding	with common pressure supply max. 12 valves on special manifolds (as accessory)
Coil spacing	16,5 mm

Dimensions [mm]

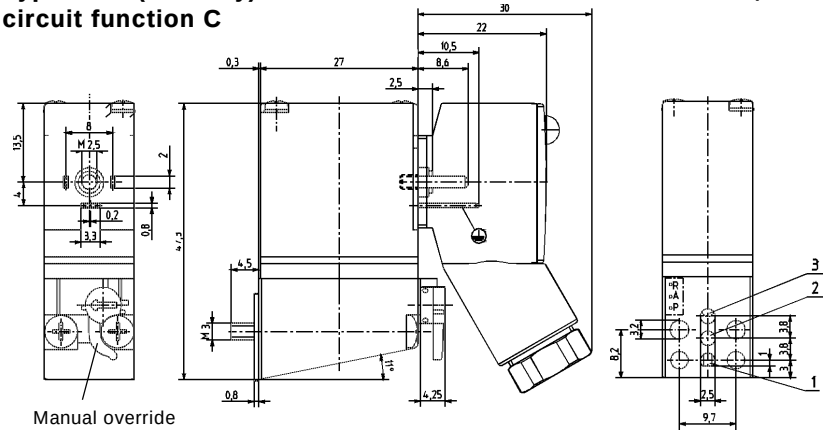
Type 6106 (3/2-Way) with Burkert manifold connection (below), circuit function C



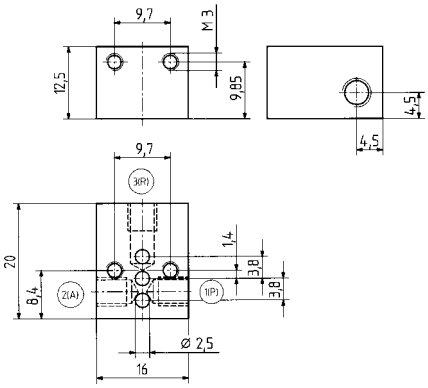
Single manifold for Burkert sub-base



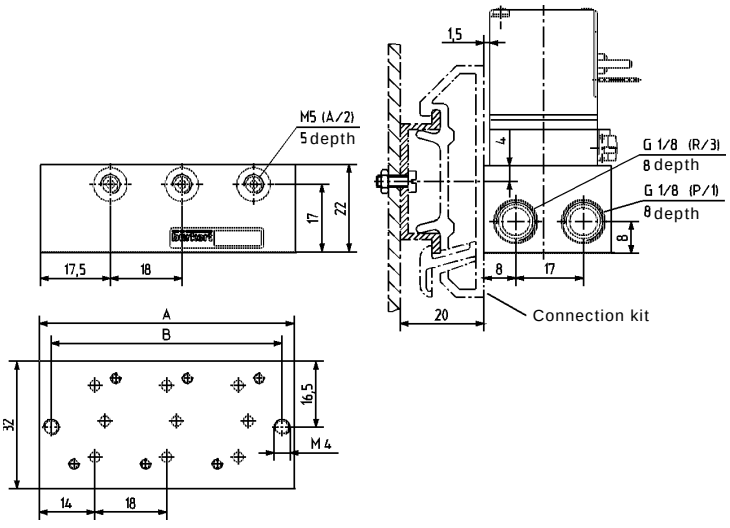
Type 6106 (3/2-Way) with side CNOMO manifold connection, circuit function C



Single manifold for CNOMO sub-base



Multiple manifold for Burkert sub-base



Direct-acting rocker Solenoid Valve, sub-base mounting
16 mm wide

Type 6105/6106
(2/2-**/**3/2-way)

Ordering Chart (Other Versions on Request)

All versions with side tag connectors, polyamide body and FKM-seal.
Supply package includes 2 mounting screws M3 x 30 and manifold seal; **without cable plug** (see accessories)

Type 6106[1] Circuit-function	DN [mm]	Q_{Nn}-value air [l/min] 1→2	[l/min] 2→3	Pressure [bar]	Port-connection interface to	Voltage[2] [V DC]	Power consumption [W]	**Item-No.**	**Item-No.** for impulse version
C	0,9	22	25	0 - 8	BURKERT	24	1,0	126 417 A	–
	0,9	22	25	0 - 8	BURKERT	24/Impulse	1,0	–	137 971 Q
	1,2	40	47	0 - 10	BURKERT	24	2,0	126 411 C	–
	1,2	40	47	0 - 10	BURKERT	24/Impulse	1,0	–	137 970 T
	1,2	40	47	0 - 10	BURKERT	110–120	3,0	126 412 D	–
	1,2	40	47	0 - 10	BURKERT	220–240	3,0	126 413 E	–
D	0,9	22	25	0 - 8	BURKERT	24	1,0	126 421 E	–
	1,2	40	47	0 - 10	BURKERT	24	2,0	126 419 L	–
C	0,9	22	25	0 - 8	CNOMO	24	1,0	126 418 K	–
	0,9	22	25	0 - 8	CNOMO	24/Impulse	1,0	–	137 972 R
	1,2	33	38	0 - 10	CNOMO	24	2,0	126 414 F	–
	1,2	33	38	0 - 10	CNOMO	110–120	3,0	126 415 G	–
	1,2	33	38	0 - 10	CNOMO	220–240	3,0	126 416 H	–
D	0,9	22	25	0 - 8	CNOMO	24	1,0	126 422 F	–
	1,2	33	38	0 - 10	CNOMO	24	2,0	126 420 R	–

[1] Type 6105 (circuit function A and B) on request.
[2] For alternating current use cable plug with appropriate rectifier (see accessories).

Accessory Ordering Chart

Unit	Characteristics	**Item-No.**
Cable plug Type 2506	no wiring, 0–250 V	008 353 P
Cable plug Type 2506	with LED, 12–24 V	008 402 A
Cable plug Type 2506	with LED, rectifier and varistor, 200–240 V	008 356 J
Other versions of cable plug Type 2506	alternate circuits (see data sheet Type 2506)	
Single manifold CNOMO	width 16 mm, port connection M5	639 885 S
Single manifold BURKERT	width 16 mm, port connection M5	623 873 V
Single manifold BURKERT	width 16 mm, port connection G1/8	634 917 L

Operation of impulse versions

- Standard cable plug type 2506
  - through external pole reversal (e.g. PLC)

- Cable plug
  - with internal pole reversal

Manifolds Ordering Chart
Multiple manifolds (material: aluminium);
for Burkert-sub-base; coil spacing 18 mm

Manifold	A [mm]	B [mm]	**Item-No.**
2 Station	46	40	629 500 J
3 Station	64	58	629 169 R
4 Station	82	76	629 501 F
5 Station	100	94	629 502 G
6 Station	118	112	629 503 H
7 Station	136	130	629 504 A
8 Station	154	148	629 505 B
9 Station	172	166	629 890 H
10 Station	190	184	629 919 H
11 Station	208	202	007 110 X
12 Station	226	220	629 920 E
Connection kit DIN-rail TS 35 x 7,5 mm			629 254 N
Blanking plate			629 327 F